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**ABSTRACT**

Previous research on the public's response to Acquired Immune Deficiency Syndrome (AIDS) has been concerned with attitudes and knowledge in relation to the disease itself. This study investigated people's willingness to interact with individuals with AIDS in the workplace. Participants (N=358) were college students with an average age of 25. Subjects were asked to imagine themselves as part of small cohesive work team whose members interacted frequently under one of six conditions. Conditions varied by type of illness of a team member (AIDS, cancer, and hepatitis) and whether or not that member had any control over acquiring the illness. Subjects also completed a survey of AIDS knowledge. Results demonstrated that type of illness affected willingness to interact with individuals; AIDS patients were reacted to least positively, followed by hepatitis, and cancer patients. Perceived control over the disease did not affect reactions. (Author/ABL)

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Workers' Reactions to AIDS and Other Illnesses

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## **Workers' Reactions to AIDS and Other Illnesses**

### **Abstract**

Previous research on the public's response to AIDS has been concerned with attitudes and knowledge in relation to the disease itself. This study investigated peoples' willingness to interact with individuals with AIDS in the workplace. Adults' reported interactions with AIDS patients were compared with others' reactions to Cancer and Hepatitis. The effects of perceived control over the cause of the disease were also examined. Exposure to the diseases was manipulated with written scenarios. Results demonstrated that type of illness affected willingness to interact with individuals--AIDS patients were reacted to least positively, followed by Hepatitis, and Cancer patients. Perceived control over the cause of the disease did not affect reactions.

## Workers' Reactions to AIDS and Other Illnesses

Since the first cases of Acquired Immune Deficiency Syndrome (AIDS) were diagnosed many episodes of public fear have been documented in the media (Albert, 1986). For example, fear of contagion has resulted in AIDS patients being fired from their jobs and being deserted by their friends and colleagues. Police officers, firefighters, and some medical personnel have worn masks and gloves when interacting with AIDS patients. Parents have withdrawn their children from schools in order to avoid contact with a student who has AIDS. In general, it would appear that AIDS patients have been ostracized from society and that the public has responded to the disease with a "plague" mentality.

Research on the public response to AIDS is limited, although it is growing. The research that exists has tended to focus on individuals' attitudes, knowledge, and behavior change related to the illness. For example, Price, Desmond, and Kukulka (1985) found that high school students have little knowledge of AIDS. In a survey of adults in three cities, Temoshok, Sweet, and Zich (1986) found general fear of AIDS and anti-gay attitudes to be negatively correlated with knowledge of the disease. Lennon, McDevitt, and Sheehan (1987) obtained similar results in a survey of university students. They also found homophobia to be the strongest predictor of attitudes to AIDS.

Thus, the research to date on the public's attitudes to AIDS has documented some of the roots of people's fears of the disease. As mentioned, most of this research has dealt with individuals' attitudes and knowledge of the AIDS illness. Little research has been directed toward assessing individuals' reactions to the AIDS patients themselves. How might people interact with individuals with AIDS? Are the media accounts of AIDS patients being ostracized accurate?

Further, little research has been conducted to compare people's response to AIDS with their responses to other illnesses. Is there a difference, for example, in how individuals respond to an AIDS patient compared with how they might react to a person with Hepatitis? Some relevant information is available. Simkins and Eberhage (1984) compared attitudes to AIDS, Herpes, and Toxic Shock Syndrome and found most individuals to be relatively unconcerned about any of these illnesses. Additionally, neither fear of AIDS nor fear of Herpes had caused any major changes in sexual behavior. Although Simkins and Eberhage provided data on attitudes to these illnesses, they did not examine how individuals with these illnesses might be treated by friends and colleagues. The primary purpose of this investigation, then, is to compare how people report they would interact in the workplace with individuals with different illnesses (AIDS, Cancer, and Hepatitis).

A second purpose of this study was to attempt to identify

those factors that influence how people might interact with AIDS patients. Two such potential factors have already been mentioned--attitudes to and knowledge of AIDS and attitudes to homosexuals. Research on prosocial behavior suggests two other factors: perceived cause of an illness and empathy. These latter variables will now be discussed.

The cause of a person's disability or illness has been shown to influence how others respond to the disabled. Those who are perceived to have disabilities they had no control over were more likely to be selected for a job (Bordieri & Drehmer, 1986a) and were judged to have a greater chance of being integrated into the workplace (Bordieri & Drehmer, 1986b) than were similarly qualified individuals who were perceived to have had some control over the cause of their disability. In their research Bordieri and Drehmer asked subjects to project how they felt others would respond to the disabled coworker. In the present investigation perceived control over the cause of AIDS and other illnesses (Cancer and Hepatitis) is manipulated and individuals are asked how they themselves would respond to an ill coworker.

It has been suggested that our empathy, or our ability to vicariously experience another person's emotions, influences our willingness to help others (Coke, Batson, & McDavis, 1978; Hoffman, 1976, 1982). Recently, researchers have differentiated between several types of empathy. For example, factor analyses (Batson, 1984; Davis, 1980, 1983) and experimental studies (Batson & Coke, 1983) have distinguished between empathic concern and perspective taking.

The ability of both these form of empathy to predict prosocial behavior towards AIDS patients will be examined in this paper. Those who are high on these forms of empathy should interact more positively toward AIDS patients.

## Method

The participants were 358 students at a midwestern university. Their ages ranged from 17 to 55, with an average of 25. There were 127 males and 231 females in the sample. All but eight had held at least one job prior to their participation.

Subjects were randomly assigned to one of six conditions. In each condition they read a scenario of approximately 180 words titled "Interactions in the Workplace". The scenario asked participants to imagine themselves as members of a small cohesive work team whose members interact frequently. The different conditions were achieved by having six endings to the scenarios. The endings differed in both the type of illness a team member had (AIDS, Cancer, and Hepatitis) and whether or not he had any perceived control over acquiring the illness (all coworkers were described as male). In the perceived control conditions 74 subjects read a scenario about a homosexual man with AIDS, 58 read about a heavy smoker with Lung Cancer, and 64 read about a drug user with Hepatitis. In the no control conditions 41 subjects read about a man who acquired AIDS through a blood transfusion, 58 read about a man with Pancreatic Cancer, and 65 read about a man who acquired Hepatitis through a blood transfusion. After reading the scenario subjects completed a seven-item questionnaire. Six of these items dealt with the subjects' interactions with their ill colleague upon his return to work. One question was included as a manipulation check to determine the effectiveness of the control manipulation (that is, whether or not subjects actually perceived the method of contracting the illness as being under the control of the colleague). Subjects were asked how much control they believed their coworker had over the cause of his illness. Subjects answered all questions on four-point Likert scales.

Participants also completed a 14-item survey of their attitudes to individuals with AIDS and a 21-item survey of their attitudes to homosexuals. Subjects indicated their level of agreement to a series of statements on four-point Likert scales. These statements covered a variety of potential reactions to individuals with AIDS and to homosexuals, such as their willingness to interact with, and their beliefs about the desirability of restricting the civil rights of, such individuals. Further information on these scales can be found in McDevitt, Sheehan, and Lennon (1987).

Subjects' knowledge of AIDS was tapped by an eight-item scale that questioned them on how individuals acquired the disease. For example, they were asked to indicate Yes, No, or I don't know to whether AIDS can be spread via saliva on a glass, kissing, sexual intercourse, and mosquitoes.

Finally, the Davis (1980, 1983) Interpersonal Reactivity Index was employed to measure empathy.



## Results

### Manipulation Check

A 3 (illness) X 2 (control) ANOVA revealed a significant main effect for both illness [ $F(2,352) = 5.82, p < .01$ ] and perceived control [ $F(1,352) = 422.12, p < .0001$ ] on the question assessing the amount of control the coworker had over acquiring his illness. However, these main effects were qualified by a significant interaction term between illness and perceived control [ $F(2,352) = 4.45, p < .05$ ]. A graph of the means for the three illness groups revealed that coworkers in the perceived control conditions were viewed as having more control over the cause of their illness than were those in the no control conditions, indicating that the control manipulation had worked.

### Work Related Variables

To test the hypothesis that coworkers' interactions with an ill colleague would be influenced both by type of illness and attributions about control over acquiring the illness, a multivariate analysis of variance (MANOVA) was conducted. The dependent variables were six questions that dealt with the subjects' interactions with their ill colleague. Illness and perceived control groups served as between-subjects factors. Responses to the six work items were used as within-subject factors. The results revealed that the pattern of responses to the work-related variables differed for type of illness [ $F(10,342) = 10.22, p < .001$ ], but not for perceived control [ $F(5,342) = 0.58, p > .05$ ], or for the illness-control interaction [ $F(10,648) = 1.00, p > .05$ ] (Table 1).

Follow-up oneway ANOVAs and Student-Newman-Keuls comparisons ( $p < .05$ ) revealed significant differences for the three illnesses on all six interaction variables. Subjects reported that they would generally interact least positively with the colleague with AIDS, followed by Hepatitis, and then Cancer. Thus, for example, individuals indicated they would interact less often and less closely with a colleague with AIDS than with a colleague with Hepatitis or Cancer.

Surprisingly, employees with Hepatitis received the worst ratings in relation to their future job performance. They were followed by Cancer and AIDS patients, in that order. Student-Newman-Keuls contrasts indicated respondents thought that colleagues with Hepatitis would be significantly less able to perform their jobs than would AIDS patients upon their return to work.

With respect to actually helping their ill colleague with his work, chi-squared analyses on each of the three illnesses indicated that most respondents said they would help, regardless of whether the coworker had control over his illness or not.

### Prediction of Respondents' Interactions with Individuals with AIDS

In order to look at AIDS alone to see which variables can be used to predict how people respond to others with this illness, a stepwise multiple regression was conducted. In this regression an additive composite of five of the six work interaction variables served as the dependent variable. The five variables (less interaction, avoid closeness, coworker's interactions with others, perceived risk to respondent's own health, and recommendations that the coworker return to work) were combined because a principal components factor analysis demonstrated that they all loaded on a single factor that was labelled "personal interaction". The sixth interaction variable, coworkers' job performance, was excluded from the composite. Item loadings on this factor ranged from .40 to .75. Cronbach's (1951) alpha for the five items was .74, indicating that the composite was internally consistent.

The independent variables entered into the regression equation were two forms of empathy (empathic concern and perspective taking), attitudes to Homosexuals, knowledge of AIDS, and attitudes to AIDS. A correlation matrix of these variables and the personal interaction composite is contained in Table 2. The independent variables were entered in temporal order so that the amount of variance change attributed to a variable reflects the effects of temporally earlier variables removed from it. We assumed that respondents would have developed a sense of empathy before any attitudes to Homosexuals and these attitudes would in turn have been developed prior to any knowledge of or attitudes to AIDS. Knowledge of and attitudes to AIDS would have been developed simultaneously. Thus the two forms of empathy were entered together, followed by attitudes to Homosexuals, and then simultaneously attitudes to AIDS and knowledge of AIDS.

Empathic concern and perspective taking accounted for a significant proportion of the variance in the personal interaction composite [ $R^2 = 11\%$ ;  $F(2,58) = 3.59$ ,  $p < .05$ ]. Attitudes to Homosexuals added 36% to the total variance, a statistically significant addition ( $F_{\text{change}}(3,57) = 37.79$ ,  $p < .0001$ ). A further nine percent was added to the total variance by the combined entry of knowledge of AIDS and attitudes to AIDS. This addition was also statistically significant ( $F_{\text{change}}(5,55) = 5.62$ ,  $p < .01$ ), as was the total variance accounted for [ $R^2 = 56\%$ ;  $F = 13.76$ ,  $p < .0001$ ]. Hence, although it is impossible to distinguish the unique contributions of the individual variables, it appears that measures of empathy, attitudes to Homosexuals, and attitudes to and knowledge of AIDS all contribute to one's interactions with a colleague who has AIDS.



## Discussion

The results indicate that media accounts of the rejection of AIDS patients are accurate. AIDS patients were responded to more negatively than were individuals with other severe illnesses. This rejection may be due to the respondents' fear of contracting the disease themselves. Respondents did perceive a greater risk to their own health from interacting with an AIDS patient than from a person with Hepatitis or Cancer.

Individuals' responses to AIDS patients appear to be highly related to their attitudes to homosexuals. The correlation between attitudes to AIDS and attitudes to homosexuals was 0.75. Subjects perceived AIDS as a homosexual disease. This perceived relationship between AIDS and homosexuality is a matter for AIDS education. Increased efforts at disseminating information that AIDS is not limited to one group may help change some behaviors and thereby slow the spread of this illness.

One of the more puzzling results was the failure, contrary to previous research, to obtain a main effect for perceived control on individuals' interactions with patients with the different illnesses. That is, respondents did not vary their reported interactions with their coworkers depending on whether or not they perceived the coworker to have control over the onset of his illness. It is difficult to account for this finding, or lack of finding, in view of the fact that the control manipulation worked. One explanation for the lack of a control effect may lie in what the subjects were asked to do. In comparison to previous research where subjects were asked to indicate how they thought others would interact with a disabled person (Broderi & Drehmer, 1986), subjects in this study were asked to imagine themselves interacting with the ill colleague. Thus, in the present study the costs of helping or interacting with the ill colleague would fall on the subjects themselves rather than on some other individual. Some of the costs that could have decreased the subjects' willingness to help include perceived contagiousness of the illness, amount of help the coworker might require, and the stigma of the illness. Because the cost of helping an extremely ill coworker may seem to be high, the influence of factors such as the degree of control over the cause of the illness would be attenuated.

Several factors were demonstrated to be important in predicting whether employees would interact with a coworker who has AIDS. Two forms of empathy, attitudes to homosexuals, and attitudes to and knowledge of AIDS predicted 56% of the personal interaction variance. These findings have implications for AIDS education: people cannot merely be told to be more reasonable or logical with respect to their interactions with AIDS patients. Such an approach neglects the fact that individuals differ in their empathy and attitudes toward homosexuals. Changing individuals' attitudes towards people with AIDS will involve education in all of these areas.

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Table 1

Illness Means and Standard Deviations for Six Interaction Items

ILLNESS						
Item	AIDS		Hepatitis		Cancer	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Less interaction	2.71	0.74	2.52	0.68	2.02	0.50
Avoid closeness	2.89	0.66	2.73	0.59	2.25	0.56
Coworker's interactions with others	3.03	0.48	2.73	0.51	2.39	0.57
Recommend that coworker return to work	1.82	0.90	1.72	0.83	1.39	0.71
Risk to health	2.16	0.93	1.92	0.76	1.20	0.53
Coworker's job performance	1.77	0.55	1.95	0.47	1.83	0.48

Note: All items are on four-point Likert-type scales. Higher scores indicate less favorable attitudes.

Table 2

Correlation Matrix of Variables in the Regression Equation


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	Empathic	Perspective	Attitudes	Knowledge	Attitudes
	Concern	Taking	to	of	to
			Homosexuals	AIDS	AIDS

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Perspective Taking	0.40***				
Attitudes to Homosexuals	-0.21***	-0.30***			
Knowledge of AIDS	0.06	0.07	-0.35***		
Attitudes to AIDS	-0.28***	-0.29***	0.75***	-0.42***	
Personal Interaction	-0.05	-0.10*	0.36***	-0.28***	0.33***

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\*p < .05, \*\*\*p < .0001